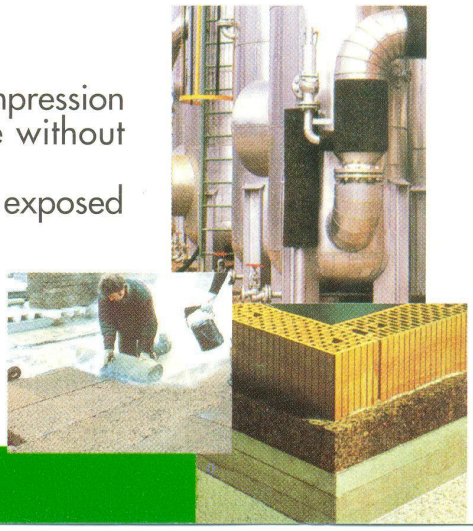
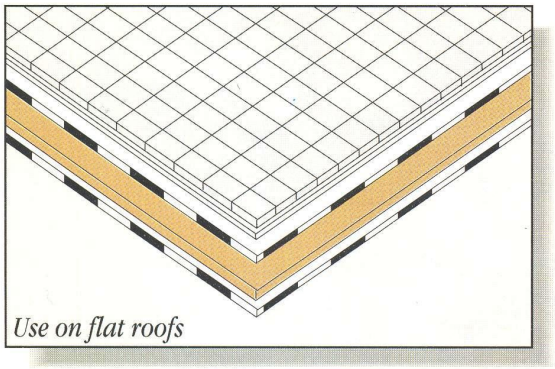
Cork Board

Few materials are as versatile or stable as cork. That fact results from the way in which cork cells combine with one another to form a dense mat of microscopic air-filled "bubbles" (about 40 million per cm3), the walls of which are highly resistant to the elements, and which are, bound together by a natural "super glue" called suberin. Cork board is a 100% natural material made from the bark of cork oak. After being granulate it is superheated and compacted into blocks, using suberin alone to bond the granules, resulting in a material with unique and natural characteristics.

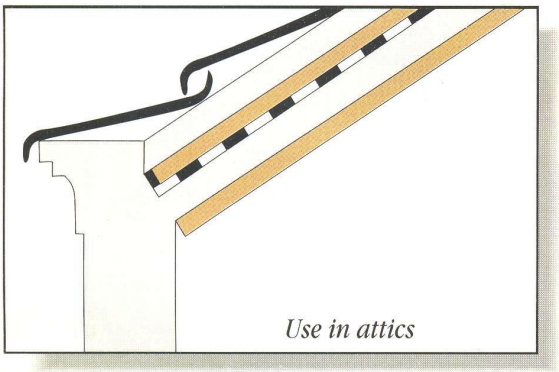
Unique thermal-insulation, anti-vibration and soundproofing properties

Cork board performs extremely well when subject to compression and bending. The material retains its form and size without suffering fatigue.
Because it is chemically neutral it is not damaged when exposed to UV radiation, nor does it attract mould. It is also resistant to hydrocarbon action, which means that it is compatible with hot bitumen.

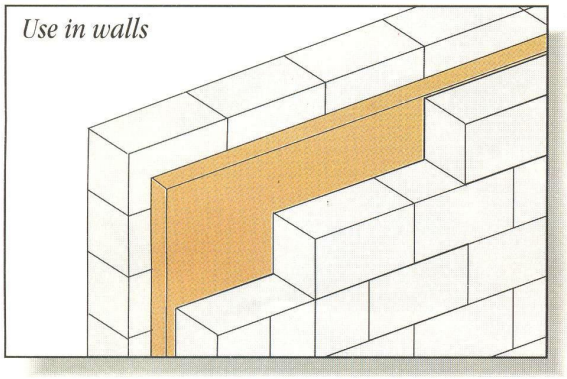




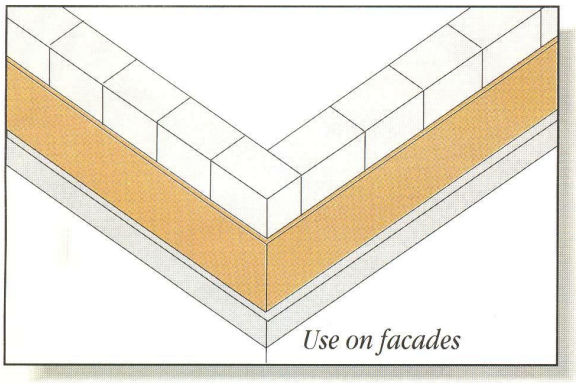
Use on flat roofs



Use in attics



Use in walls



Use on facades

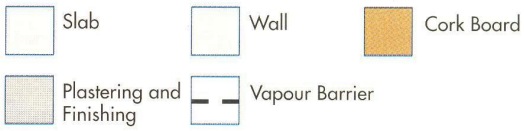
Thermal insulation • Cork Board does not conduct electricity, has a very low level of flammability, and does not release chlorine or cyanide when exposed to fire, making it an excellent form of thermal insulation for industry and the home.

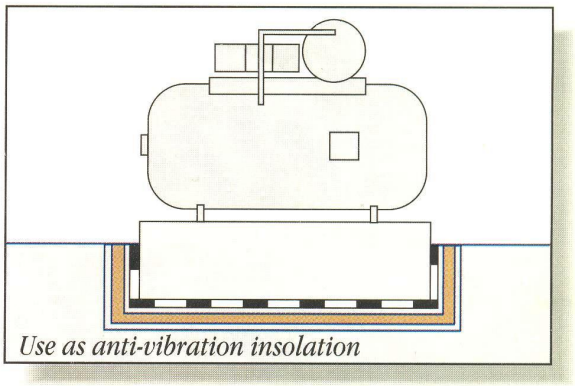
Anti-vibration • Insulation against vibration from industrial machinery, a range of board densities being available to suit every situation.

Soundproofing • The characteristics of the raw materials combined with its density make cork board an excellent product for acoustic absorption, insulation from airborne noise and acoustic insulation from percussion noise.

Benefits

Ecological
Versatile
Safe
Easy to use
Unlimited life span
Energy-saving





Use as anti-vibration insolation

Technical features of cork board

Weight by volume	approx. 120 Kg/m3
Thermal conductivity (20° C)	0,040 W/mk
Normal tensile strength on plane of sheet	0,94 Kg/cm2
Bending strength	1,8 Kg/cm2
Compression strength	0,2 Kg/cm2
Compression limit	1Kg/cm2
Deformation at 10% compression DIN 18161 Part 1	1,78 Kg/cm2
Specific heat	1,67 Kj/Kg °C
Vapour and water diffusion resistance	u5-30
Working temperature	-200 °C to 130° C
Dynamic rigidity (for 50mm thickness)	126 N/cm3
Modulus of elasticity	5N/mm2
Vapour conductivity	0,017-0,003 g/mh mm section
Thermal expansion coefficient (20° C)	25 a 50 x 10^{-6}
Dimensional stability	stable, does not expand or shrink
Does not disintegrate in boiling water (3-hour test)	
Size of sheets	1000 x 500 mm with thicknesses of between 10 and 320 mm

Thermal insulation figures for cork board (R in m2 kW and k in W/m2k)

Thickness	*10 mm*	*20 mm*	*30 mm*	*40 mm*	*50 mm*	*60 mm*	*70 mm*	*80 mm*	*90 mm*	*100 mm*
R	0,244	0,488	0,732	0,976	1,220	1,463	1,707	1,951	2,195	2,439
k	2,439	1,529	1,114	0,876	0,722	0,614	0,534	0,472	0,424	0,384

For more information about Cork Board, its technical specifications and use, please contact our technical department:

EXPOCOR, Exportação de Cortiça • Edifício Meladas, nº 66 • Meladas • 4535 MOZELOS VFR • PORTUGAL
tel: (02) 764 69 85 • fax: (02)764 83 92

expocor

amorim
AMORIM GROUP